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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,689	08/27/2001	Michael Knaupp	340058.534	4320
500	7590	08/30/2005	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			PRONE, JASON D	
701 FIFTH AVE			ART UNIT	
SUITE 6300			PAPER NUMBER	
SEATTLE, WA 98104-7092			3724	

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	09/940,689	KNAUPP ET AL.	
	Examiner	Art Unit	
	Jason Prone	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-22 and 24-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-22 and 24-43 is/are allowed.
- 6) ☒ Claim(s) 1,3,8 and 9 is/are rejected.
- 7) ☒ Claim(s) 4-7 and 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/14/05 & 6/3/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd et al. (2002/0066345) in view of Hoffman et al. In regards to claim 1, Shepherd et al. discloses the invention including a cutting head assembly having a body adapted to receive an orifice at an orifice location for generating a high pressure fluid jet (16), a mixing tube positioned within the body of the cutting head assembly downstream of the orifice location (30), a motion assembly (48) coupled to the cutting head assembly via a clamp positioned around the body of the cutting head assembly (36), and the outer surface of the body mates with an inner surface of the clamp in a weight-bearing manner to vertically position and support the cutting head assembly (36).

However, Shepherd et al. fails to disclose a raised member is provided on the outer surface of the body and a recess is provided on the inner surface of the clamp, that the raised member mates with the recessed, and that the clamp has a quick-release mechanism. Hoffman et al. teaches a raised member that is provided on the outer surface of the body (28) and a recess is provided on the inner surface of the clamp (22), the raised member mates with the recessed (Fig. 2), and the clamp has a quick-release mechanism (32). Therefore, it would have been obvious to one of

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ordinary skill in the art, at the time of the invention, to have provided Shepherd et al. the clamp, as taught by Hoffman et al., to allow for a more secure fit and an easier way to remove the clamp.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd et al. (2002/0066345) in view of Hoffman et al. as applied to claim 1 above, and further in view of Stewart et al. Shepherd et al. (2002/0066345) and Hoffman et al. disclose the invention but fails to disclose a position sensor coupled to the clamp adjacent the cutting head. Stewart et al. teaches a position sensor coupled to a clamp adjacent the cutting head (224). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Shepherd et al. (2002/0066345) in view of Hoffman et al. with a position sensor, as taught by Stewart et al., to allow for a more precise cut.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd et al. (2002/0066345) in view of Hoffman et al. as applied to claim 1 above, and further in view of Gerber. Shepherd et al. (2002/0066345) and Hoffman et al. disclose the invention but fails to disclose a flexible shield coupled to and surrounding an end region of the mixing tube. Gerber teaches a flexible shield coupled to and surrounding an end region of a mixing tube (70). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Shepherd et al. (2002/0066345) in view of Hoffman et al. with a shield, as taught by Gerber, to prevent unwanted materials coming into contact with the jet.

Response to Arguments

5. Applicant's arguments filed 01 July 2005 have been fully considered but they are not persuasive. The term assembly is defined as:

Assembly

- a. *The putting together of manufactured parts to make a completed product, such as a machine or electronic circuit.*
- b. *A set of parts so assembled.*

The American Heritage® Dictionary of the English Language, Fourth Edition
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Therefore the term "cutting head assembly" is referring to the collection of parts completed to make-up the cutting head. Therefore, item "16" is considered the cutting head assembly and the tube which clamp 36 encircles is clearly part of the body of the cutting head assembly. The Shepherd et al. patent is silent on the structure of the interior portion of the clamp. Hoffmann et al. clearly teaches that it is old and well known in the art of clamping tube-like structures for the clamp to incorporate a recessed portion and for the clamped tube-like item to incorporate a raised portion to mate with the recessed portion allowing for a more secure connection.

Allowable Subject Matter

6. Claims 4-7 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 13-43 are allowed.

8. The following is an examiner's statement of reasons for allowance: Claims 13-43 are allowable because of the apparatus with a clamp, with a quick-release mechanism, that holds the cutting head assembly when the nozzle body assembly is separated from

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the cutting head assembly. None of the prior art cited discloses an apparatus that incorporates the use of a clamp that has a quick-release mechanism so that the clamp can easily be removed from the body of the cutting head assembly and that holds the cutting head assembly when the nozzle body assembly is separated from the cutting head assembly allowing access to the orifice location without removing the cutting head assembly. Therefore, in view of what has been stated above, the claims are allowable over the art of record.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is (571) 272-4513. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571) 272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JP
August 22, 2005



Allan N. Shoap
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